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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,721	09/05/2003	Xiaowu Pang	NIH202.001C1	8676
20995 7590 03/20/2008 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614				
EXAMINER				
MOSHER, MARY				
ART UNIT		PAPER NUMBER		
1648				
NOTIFICATION DATE		DELIVERY MODE		
03/20/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com  
eOAPilot@kmob.com

# Office Action Summary

**Application No.**

10/656,721

**Applicant(s)**

PANG ET AL.

**Examiner**

Mary E. Mosher, Ph.D.

**Art Unit**

1648

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2, 8 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 8, 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

Claims 2, 8, and 17 remain rejected under 35 U.S.C. 103(a) as being unpatentable over [Westaway (US6893866) and/or Khromykh et al (Journal of Virology 71:1497-1505, 1997; in IDS) and/or Khromykh (Current Opinion in Molecular Therapeutics 2(5):555-569, 2000; in IDS)] in view of Polo et al (Journal of Virology 71:5366-5374, 1997; in IDS), for reasons of record. Applicant argues that Polo 1997 teaches away from the invention, because Polo used an unconventional yeast host cell to stably propagate cDNA encoding infectious Dengue virus. However, Polo provides a solution to the prior problem of Dengue cDNA stability, by teaching propagation of the cDNA in yeast. The use of a yeast host does not in any way discourage one skilled in the art from constructing dengue subgenomic replicons analogous to the Kunjin subgenomic replicons taught in the primary references, even if it does suggest propagating the cDNA constructs encoding the replicons in yeast. It is concluded that the reference does not teach away from the invention as claimed, and the rejection is maintained.

Claim 16 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Khromykh et al (Journal of Virology 71:1497-1505, 1997) in view of Polo et al (Journal of Virology 71:5366-5374, 1997) and Fields (1996), optionally in view of [Westaway (US6893866) and/or Khromykh (Current Opinion in Molecular Therapeutics 2(5):555-569, 2000; in IDS)], for reasons of record. Applicant's arguments are directed at the teachings of Polo, which are answered above.

Claims 18-20 remain rejected under 35 U.S.C. 103(a) as being unpatentable over [Westaway (US6893866) and/or Khromykh (Current Opinion in Molecular Therapeutics 2(5):555-569, 2000; in IDS)] in view of Polo et al (Journal of Virology 71:5366-5374, 1997), optionally in view of Khromykh et al (Journal of Virology 71:1497-1505, 1997), for reasons of record. Applicant did not argue this rejection.

### ***Double Patenting***

Claims 2, 8, 16, 17-20 remain provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 11/194,342, for reasons of record.

Claims 2, 8, 16, 17-20 remain provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6, 8, 22-27 of copending Application No. 11/192,923, for reasons of record.

Applicant argues that the provisional double patenting rejections can be withdrawn if they are the only rejection remaining in this, the earliest-filed application. The examiner agrees. However, the provisional double patenting rejections are not the only rejections remaining. Therefore the provisional rejections are not withdrawn.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary E. Mosher, Ph.D. whose telephone number is 571-272-0906. The examiner can normally be reached on varying dates and times; please leave a message.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campbell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

3/11/08

/Mary E Mosher, Ph.D./  
Primary Examiner, Art Unit 1648

